

ABSTRACT

An integrated circuit device having a send/receive macro for serially transferring addresses and data to or from an external device via a serial transfer bus, the 5 integrated circuit device includes: a CPU for performing predetermined processing. The send/receive macro includes a send/receive buffer accessed by the CPU, for storing a plurality of units of data to be transmitted or received over the serial transfer bus; an acknowledge detection 10 unit for detecting a data acknowledge signal transmitted from a receiving device in response to transmission of predetermined units of data; and a data send unit for transmitting data stored in the send/receive buffer, in response to detection of the data acknowledge signal by 15 the acknowledge detection unit, without generating any interrupt to the CPU. And the acknowledge signal detection unit generates a data acknowledge signal non-detection interrupt to the CPU if the acknowledge detection unit does not detect a data acknowledge signal transmitted from the 20 receiving device in response to transmission of the predetermined units of data.